



MICHIGAN AIRPORT DEVELOPMENT PROGRAM PACKAGE

FIVE YEAR AIRPORT CAPITAL IMPROVEMENT PLAN

Fiscal Years 2014 - 2019

Wexford County Airport

Cadillac, Michigan

Submitted By: Wexford County Airport Authority

Date: November 14, 2013

MAP Meeting Date: 28-Oct-13

Revision Date: 30-Oct-13

Prepared By:



MICHIGAN STATE BLOCK GRANT PROGRAM
FIVE-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2014* to FY-2018 -
*ACIP includes current development year (2013 already programmed - minor changes acceptable)

Airport Name: Wexford County Airport								Date prepared: 5/29/2013		Revised: 7/12/2013; 10/30/2013	
Associated City: Cadillac								Prepared By:		QoE Consulting	
Sponsor: Wexford County Airport Authority								Sponsor email address & phone: manager@cadillacairport.com (231) 779-9525			
Airport Identifier: CAD								FINAL ACIP due to MDOT AERO: no later than 12/15/13			
Development Year	Project Description	Shown on ALP? (Yes or No)	ACIP Code**	NPIAS Priority Rating**	Federal Entitlements	Federal Apportionment	Federal Discretionary	State	Local	Total	Remarks/Item Justification - Provide as much detail as possible.
2014	Cracksealing and paint marking (remaining FY 2011 AIP funds)	NA	60	PL PL MA	16,749			441	441	17,630	Cracksealing and paint arking using AIP funds, but through the AERO statewide program. Depicted budget dreived using rmaining FY2011 AIP funds.
2014	Design of Apron Rehabilitation and Expansion (FY2013 AIP funds)	YES	60	RE AP IM	81,000			4,500	4,500	90,000	Per PCI conducted in October, 2013 - apron PCI rating was 42 (down from the low 70's in 2010). The latest PCI number supports a QoE visual inspection in May, 2013 showing the need for apron rehabilitation in the next few years to address apron condition and potential FOD issues.
2014	Aircraft fuel system modification	YES							50,000	50,000	Sump system and filter for 100LL; new pay-at-the pump system (such as QT Technologies Site Minder, or similar); current system installed 10 years ago and is now outdated. Low priority for AIP funding. Suggested to obtain a loan from AERO to fund locally.
2015 or 2016	Construct Apron Rehabilitation and Expansion (remaining FY2013 AIP funds plus FY 2014 and 2015 AIP funds)	YES	60	RE AP IM	369,000	562,500		51,750	51,750	1,035,000	See 2014 Remarks/Justification for apron rehabilitation. 2014 Apron Design will include an Apron Utilization Plan to determine apron expansion needs. It presently appears, based on aircraft fueling system location and itinerant aircraft use, the apron layout is not conducive to aircraft parking, fueling, and hangar area access.
2017	Airport Secrutiy Fence, including 3 manual, cantilever gates and 2 electric, card operated gates (FY 2016 and FY 2017 AIP funds)	YES	41	ST EQ SE	300,000	37,500		18,750	18,750	375,000	This project will complete airport perimeter fencing to maintain airport security/safety by reducing wildlife/ORV/ATV intrusion onto airport property.
2017	Runway 7 approach clearing	YES							40,000	40,000	Runway 7 approach area is starting to have overgrowth, to be budgeted for and cleared in 2016.
2018	Rehabilitate Parallel Taxiway	YES	66	RE TW IM	150,000	525,000		37,500	37,500	750,000	Rehabilitate parallel taxiway system to maintain operation and reduce FOD and damage to aircraft. October, 2013 PCI rating ws 58.
2019	Rehabilitate Airport Parking Lot and Entrance Road (FY 2019 AIP funds)	YES	18	OT OT PA	150,000	23,700		9,650	9,650	193,000	Exisitng parking lot is in poor condition creating potential FOD that can be carried airside. A PCI will be conducted prior to the anticipated project year.
2020											
2021											
2022											
2023											
2024											
2025											
TOTALS					1,066,749	1,148,700	0	122,591	212,591	2,550,630	

*Proposed airport development must be shown on current FAA-approved ALP prior to funding project.

**In accordance with FAA Order 5100.39A, Appendix 6 - Fields need to be completed
(Refer to Airport Code spreadsheet provided on MDOT Aeronautics website under Block Grant Program for specific airport code)

Do NOT alter spreadsheet format



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4100 CAPITAL CITY BLVD., FLR 2
LANSING, MI 48906

P: 517-327-1980
F: 517-327-1982

ITEM SHEET

ITEM	Apron Design

ITEM IS ON ALP? ☐ YES
☐ NO

FAA Approval Date:

FUNDING YEAR	
Local Plan:	2014
Mtg. Decision:	

ESTIMATE COST	
Total:	\$90,000
Federal:	\$81,000
State:	\$4,500
Local:	\$4,500

Instructions:

List all reasons/need for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increase in aircraft/vehicle weight and/or usage, etc. Use additional sheets as

An apron utilization plan will be done to determine the taxilanes and aircraft parking locations in order to best accommodate itinerant aircraft parking, aircraft fueling, and aircraft access to the west hangar area. The existing apron was built in 1982. A PCI evaluation in October, 2013 resulted in a rating in the low 40's. Because of its age and the latest PCI being low, the pavement has met its useful life with significant cracking occurring and FOD becoming an issue. The expansion of the apron will improve aircraft parking and the aircraft flow around the fuel dispensers. The new connector taxiway will improve access from the parallel taxiway to the hangars, by reducing the need for 'hangared' aircraft to traverse the apron to access the taxiway/runway system.



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ITEM SHEET

ITEM	Apron Construction

ITEM IS ON ALP? ☐ YES
☐ NO

FAA Approval Date:

FUNDING YEAR	
Local Plan:	2015 or 2016
Mtg. Decision:	

ESTIMATE COST	
Total:	\$1,035,000
Federal:	\$931,500
State:	\$51,750
Local:	\$51,750

Instructions:

List all reasons/need for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increase in aircraft/vehicle weight and/or usage, etc. Use additional sheets as needed.

See the Item Sheet for 2014.



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ENGINEERING COST ESTIMATE

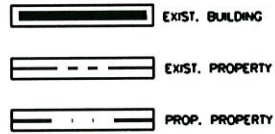
Airport:	Wexford County Airport	<input type="checkbox"/> Final Design
Location:	Cadillac, MI	<input checked="" type="checkbox"/> Project Programming
Project No.:		<input type="checkbox"/> Feasibility Study
Contract No.:		<input type="checkbox"/> State Planning
Date:	May 9, 2013	Based on FY 2013 Dollars
Revised:	June 24, 2013	

Work Description:

Reconstruct apron and connector taxiway and expand apron (455' X 200') and add new 35' connector taxiway from expanded apron to parallel taxiway

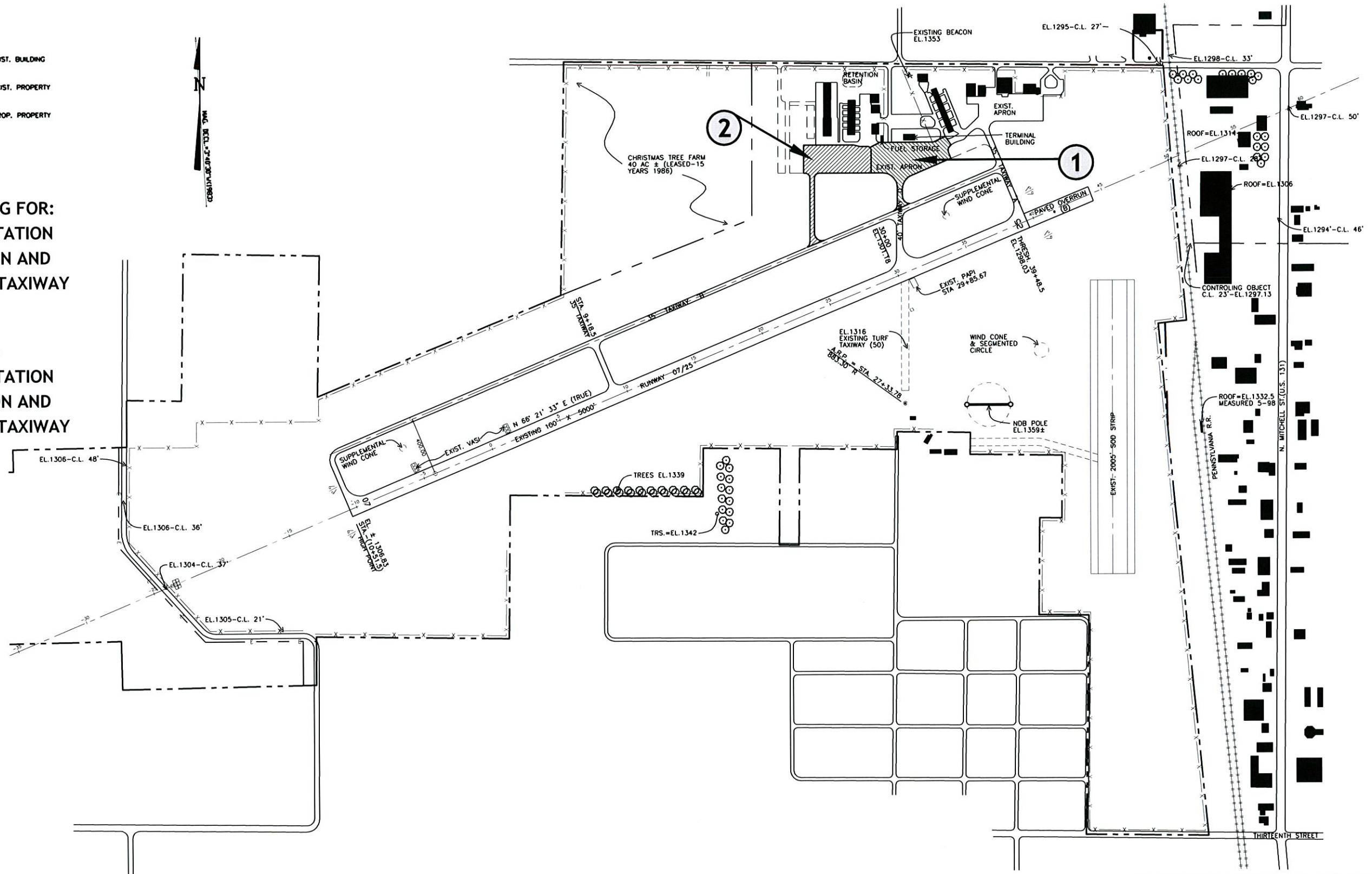
Item Description	Unit	Total Qty	Unit Price	Total Amount
mobilization and general conditions	ls	1	\$45,000.00	\$45,000.00
safety and security	ls	1	\$10,000.00	\$10,000.00
permits	dlr	1,000	\$1.00	\$1,000.00
electrical handhole, with cover, as specified	ea	4	\$3,000.00	\$12,000.00
underground electrical duct, 6 bank 3" dir bur	lft	560	\$40.00	\$22,400.00
unclassified excavation	cyd	6,500	\$6.00	\$39,000.00
removal and disposal of concrete pavement	syd	100	\$10.00	\$1,000.00
pulverize bituminous pavement	syd	14,000	\$1.00	\$14,000.00
salvage base material	cyd	1,300	\$5.00	\$6,500.00
fine grade and compact base	syd	22,000	\$2.00	\$44,000.00
erosion control, silt fence	lft	200	\$5.00	\$1,000.00
sawing bituminous pavement	lft	1,000	\$2.00	\$2,000.00
aggregate base course, 90% crushed	cyd	800	\$32.00	\$25,600.00
bituminous aggregate 20 aaax 4"	ton	5,900	\$75.00	\$442,500.00
portland concrete 7"	syd	1,800	\$45.00	\$81,000.00
paint marking	ls	1	\$5,000.00	\$5,000.00
turf & mulch	ls	1	\$5,000.00	\$5,000.00
drainage	ls	1	\$20,000.00	\$20,000.00
LED apron light fixtures	ea	4	\$10,000.00	\$40,000.00
miscellaneous	ls	1	\$83,000.00	\$83,000.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
Construction Subtotal:				\$900,000
Engineering & Administration:				\$135,000
Project Total:				\$1,035,000

LEGEND



2014
DESIGN ENGINEERING FOR:
① APRON REHABILITATION
② APRON EXPANSION AND
CONNECTOR TAXIWAY

2015
CONSTRUCTION OF:
① APRON REHABILITATION
② APRON EXPANSION AND
CONNECTOR TAXIWAY



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WEXFORD COUNTY AIRPORT

2014 - 2015 PROGRAM

ACIP SKETCH

OCTOBER 30, 2013





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4100 CAPITAL CITY BLVD., FLR 2
LANSING, MI 48906

P: 517-327-1980

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ITEM SHEET

ITEM	Airport Security Fence

ITEM IS ON ALP? ☐ YES
☐ NO

FAA Approval Date:

FUNDING YEAR	
Local Plan:	2017
Mtg. Decision:	

ESTIMATE COST	
Total:	\$375,000
Federal:	\$337,500
State:	\$18,750
Local:	\$18,750

Instructions:

List all reasons/need for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increase in aircraft/vehicle weight and/or usage, etc. Use additional sheets as needed.

Maintaining the security of the airport from wildlife as well as pedestrians and vehicles is essential to the safety of the airport and its users. Install 10' tall animal control fence, with gates, on south side of the airport (2,000'+/-) and around three parcels at the airport's west side (7,000'+/-).



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ENGINEERING COST ESTIMATE

Airport:	Wexford County Airport	<input type="checkbox"/>	Final Design
Location:	Cadillac, MI	<input checked="" type="checkbox"/>	Project Programming
Project No.:		<input type="checkbox"/>	Feasibility Study
Contract No.:		<input type="checkbox"/>	State Planning
Date:	May 9, 2013		Based on FY 2013 Dollars
Revised:	June 24, 2013		

Work Description:

Airport Security Fence (7,000 lf)

Item Description	Unit	Total Qty	Unit Price	Total Amount
mobilization and general conditions	ls	1	\$10,000.00	\$10,000.00
safety and security	ls	1	\$2,000.00	\$2,000.00
permits	dlr	1,000	\$1.00	\$1,000.00
10' fence (south property line)	lft	2,000	\$20.00	\$40,000.00
10' fence (west property line)	lft	5,000	\$20.00	\$100,000.00
gates - manual, slide-by cantilever	ea	3	\$20,000.00	\$60,000.00
gates - electric, card controlled	ea	2	\$30,000.00	\$60,000.00
miscellaneous	ls	1	\$27,000.00	\$27,000.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
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				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
Construction Subtotal:				\$300,000
Engineering & Administration:				\$75,000
Project Total:				\$375,000



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ITEM SHEET

ITEM	Rehabilitate Parallel Taxiway

ITEM IS ON ALP? ☒ YES
☐ NO

FAA Approval Date:

FUNDING YEAR	
Local Plan:	2018
Mtg. Decision:	

ESTIMATE COST	
Total:	\$750,000
Federal:	\$675,000
State:	\$37,500
Local:	\$37,500

Instructions:

List all reasons/need for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increase in aircraft/vehicle weight and/or usage, etc. Use additional sheets as needed.

The parallel taxiway was constructed in several projects: 1985 (Center section), 1991 (SW end), and 1997 (NE end). The pavement is developing large cracks and becoming difficult to maintain. The October, 2013 PCI evaluation resulted in a Taxiway PCI of 58. Rehabilitation will consist of pulverizing, grading, compacting and paving (4" bituminous surface) about two-thirds of the existing pavement and cracksealing the remaining one-third. Areas of pavement failure along the taxiway edges must be considered during the design phase to assure the rehabilitated pavement achieves a 20-year design life.

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ITEM SHEET

ITEM	Rehap airport parking lot and entrance drive

ITEM IS ON ALP? ☐ YES
☐ NO

FAA Approval Date:

FUNDING YEAR	
Local Plan:	2019
Mtg. Decision:	

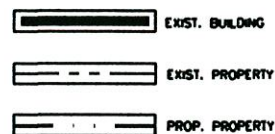
ESTIMATE COST	
Total:	\$193,000
Federal:	\$173,700
State:	\$9,650
Local:	\$9,650

Instructions:

List all reasons/need for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increase in aircraft/vehicle weight and/or usage, etc. Use additional sheets as needed.

Existing parking lot is in poor condition. It was built in 1982 and has served it useful life.

LEGEND



2017

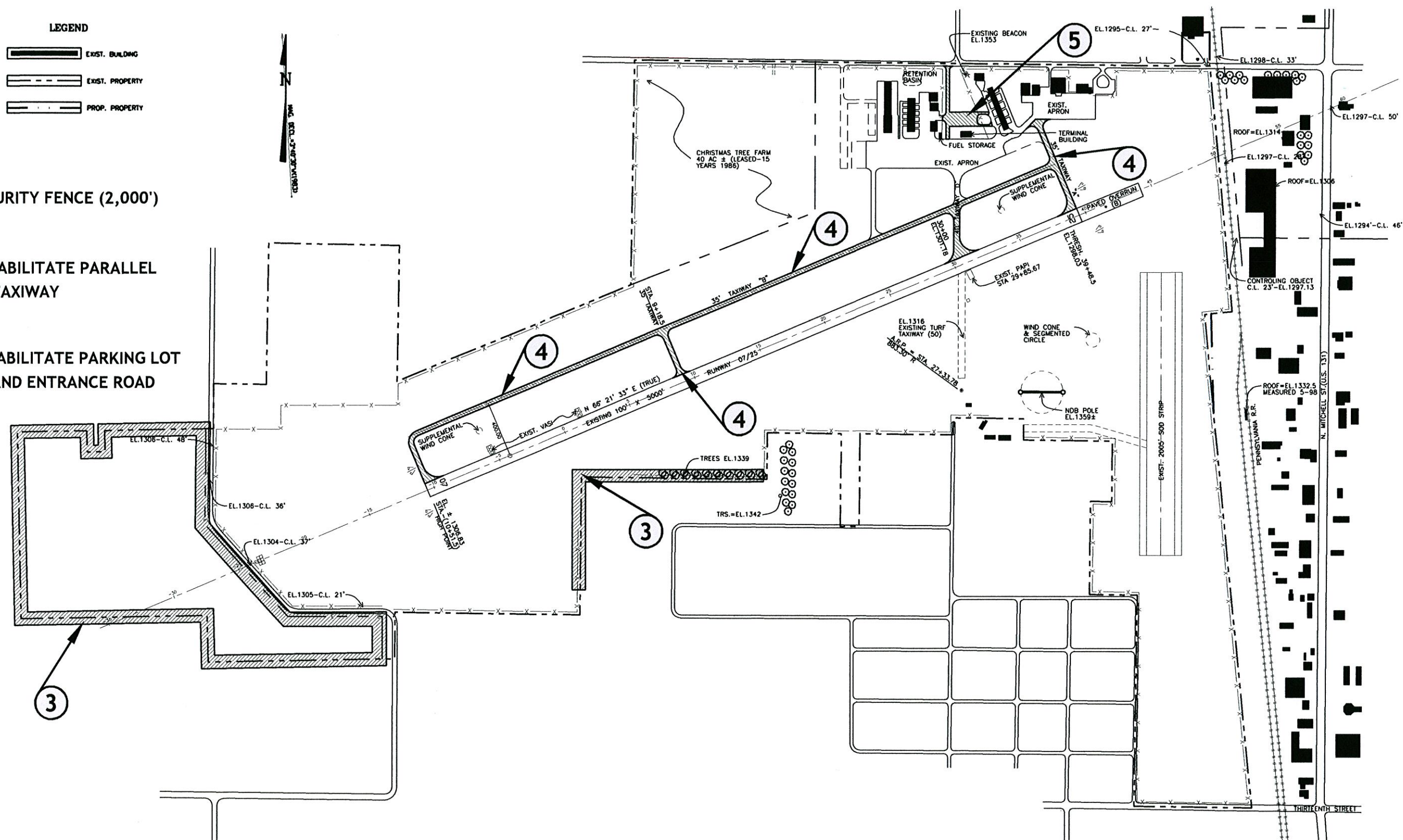
③ SECURITY FENCE (2,000')

2018

④ REHABILITATE PARALLEL TAXIWAY

2019

⑤ REHABILITATE PARKING LOT AND ENTRANCE ROAD



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WEXFORD COUNTY AIRPORT

2017 - 2019 PROGRAM

ACIP SKETCH

OCTOBER 30, 2013

